

FIG. 1

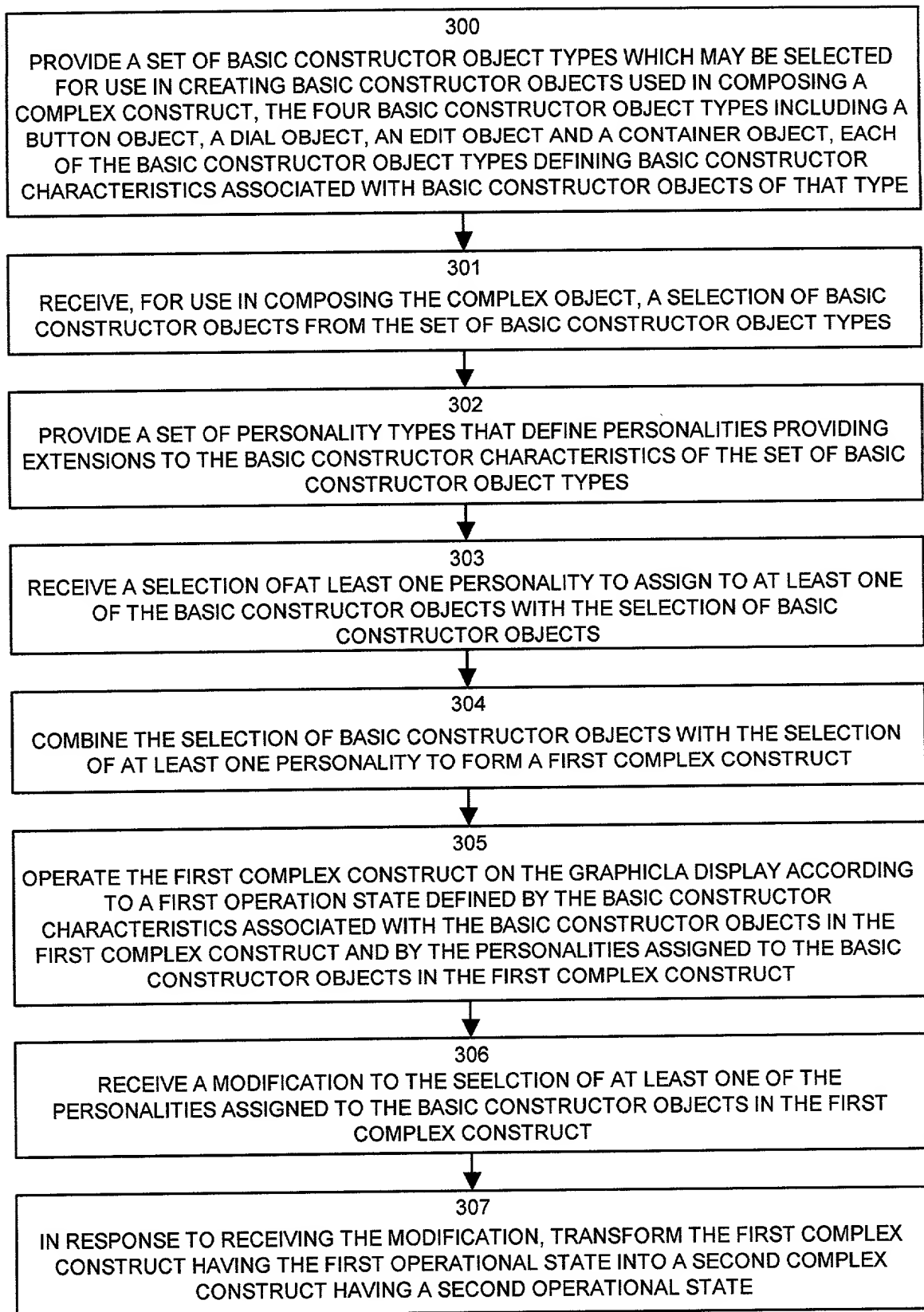


FIG. 2

FIG. 3 is a block diagram of a complex constructor operator system. The system includes a constructor selector (240) and a personality selector (242). The constructor selector (240) receives inputs from object types (251, 252, 253, 254) and outputs to object instances (256, 257, 258, 259). The personality selector (242) receives inputs from personality types (261, 262, 263, 264, 271) and outputs to personality instances (266-1, 267-1, 268-1, 269-1). Both object instances and personality instances feed into a plugable personality engine (270). The engine (270) produces a first complex construct (280-1), which is then processed by a complex constructor operator (285) to produce a new complex construct (280-2). The operator (285) also feeds back into the engine (270).

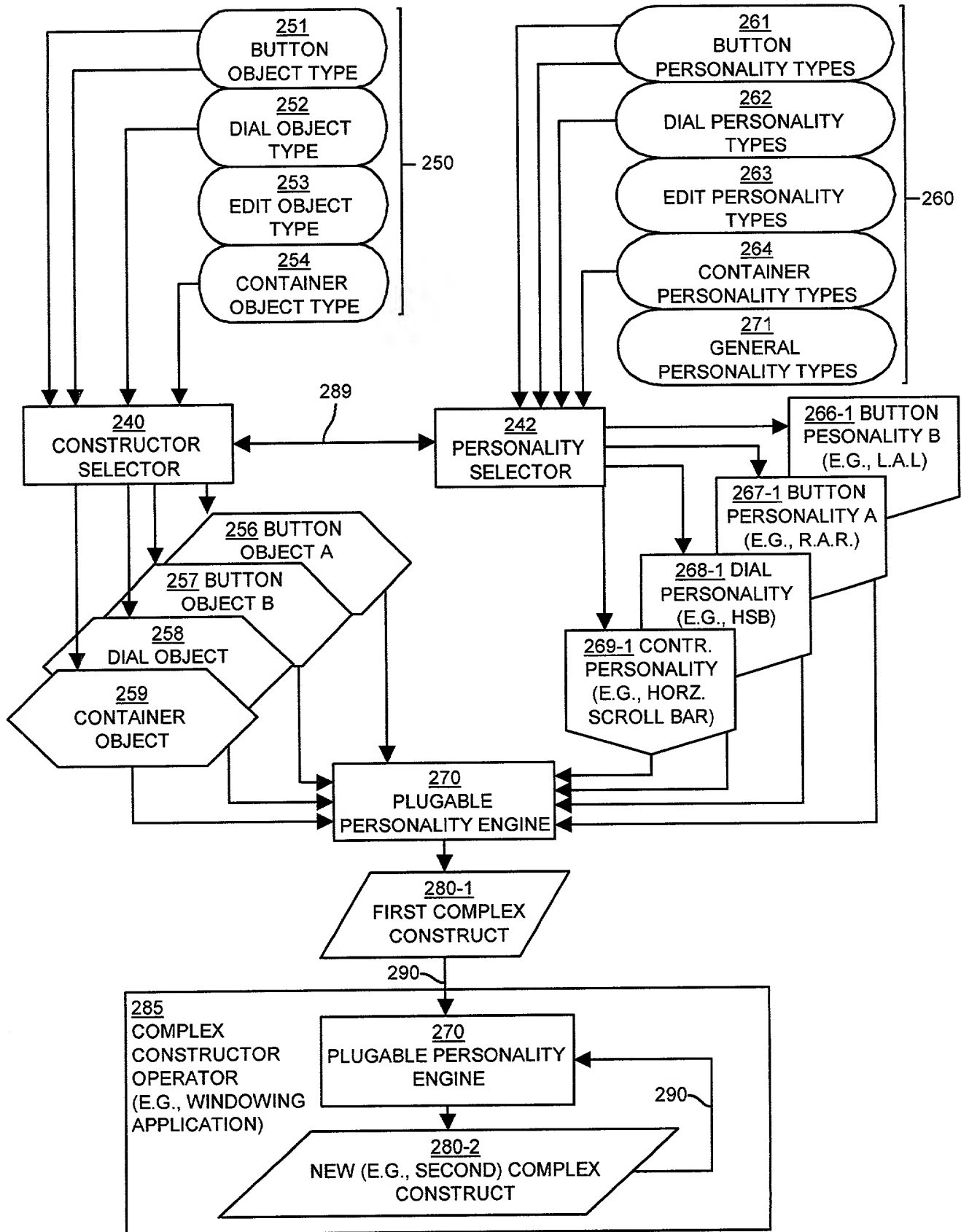


FIG. 3

251  
BUTTON OBJECT TYPE

301  
BASIC BUTTON CONSTRUCTOR CHARACTERISTICS (E.G., SELECTION  
STATE DETECTION/NOTIFICATION FUNCTIONS - BUTTON CLICKED,  
BUTTON REPEAT, BUTTON PRESSED, BUTTON RELEASED)

252  
DIAL OBJECT TYPE

302  
BASIC DIAL CONSTRUCTOR CHARACTERISTICS (E.G., RANGE  
SELECTION/NOTIFICATION FUNCTIONS)

253  
EDIT OBJECT TYPE

303  
BASIC EDIT CONSTRUCTOR CHARACTERISTICS  
(E.G., DATA INPUT/OUTPUT/STORAGE/ACCESS FUNCTIONS)

254  
CONTAINER OBJECT TYPE

304  
BASIC CONTAINER CONSTRUCTOR CHARACTERISTICS (E.G., LAYOUT  
MANAGEMENT, PARENTING, EVENT INTERCEPTION FUNCTIONS)

FIG. 4

261-E BUTTON PERSONALITY TYPE (E.G., RADIO BUTTON)

261-1 BUTTON PERSONALITY TYPE (E.G., PUSH BUTTON)

312-1

EXTENDED PUSH BUTTON EVENT HANDLING FUCNTIONALITY

313-1 PUSH BUTTON LAYOUT MANAGEMENT

262-F DIAL PERSONALITY TYPE (E.G., METER)

262-1 DIAL PERSONALITY TYPE (E.G., HSB)

314-1

EXTENDED DIAL HSB EVENT FUNCTIONALITY (E.G., HSB RANGE  
SELECTION/NOTIFICATION FUNCTIONS)

315-1 HSB DIAL LAYOUT INFORMATION

263-G EDIT PERSONALITY TYPE (E.G., SPREADSHEET)

263-1 EDIT PERSONALITY TYPE (E.G., TEXT)

316-1

EXTENDED TEXT EDIT EVENT FUNCTIONALITY  
(E.G., TEXT DATA INPUT/OUTPUT/ACCESS FUNCTIONS)

317-1 DEFAULT TEXT EDIT LAYOUT INFORMATION

264-H CONTAINER PERSONALITY TYPE (E.G., CIRCLE)

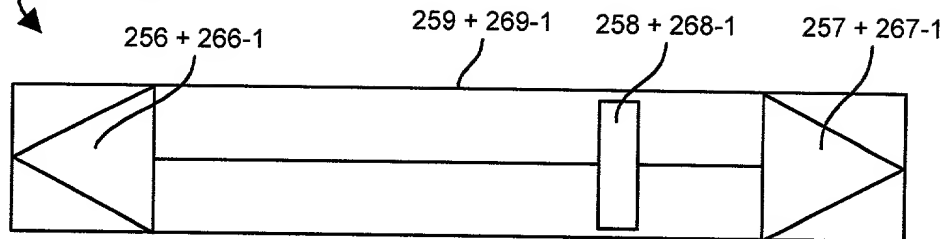
254-1 CONTAINER PERSONALITY TYPE (E.G., SQUARE)

318-1 EXTENDED SQUARE CONTAINER CONSTRUCTOR  
CHARACTERISTICS(E.G., LAYOUT MANAGEMENT, PARENTING, EVENT  
INTERCEPTION FUNCTIONS)

319-1 DEFAULT SQUARE CONTAINER LAYOUT INFORMATION

FIG. 5

280-1  
FIRST COMPLEX  
CONSTRUCT  
(E.G., HORIZONTAL  
SCROLLBAR WITH  
DUAL SIDED BUTTONS)



280-2  
NEW (E.G. SECOND)  
COMPLEX  
CONSTRUCT  
(E.G., LOCKABLE  
KNOB SELECTOR)

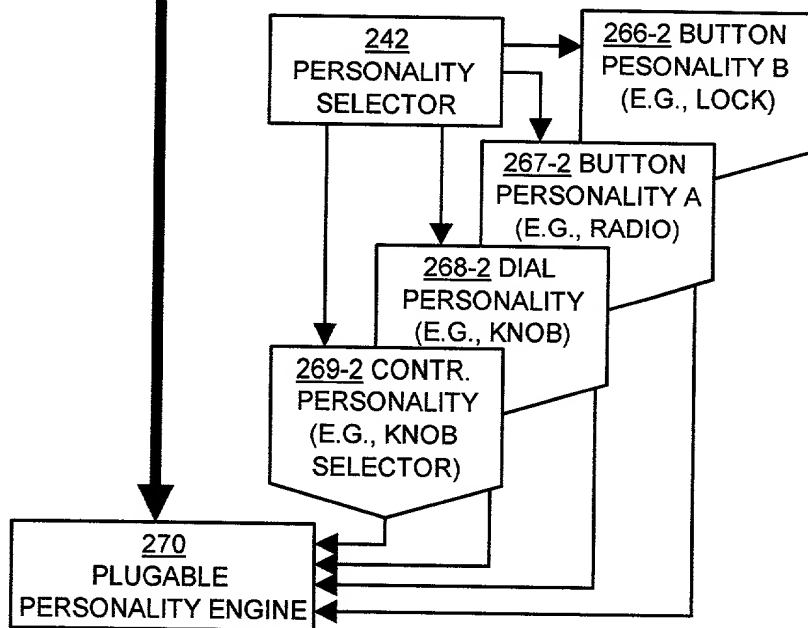
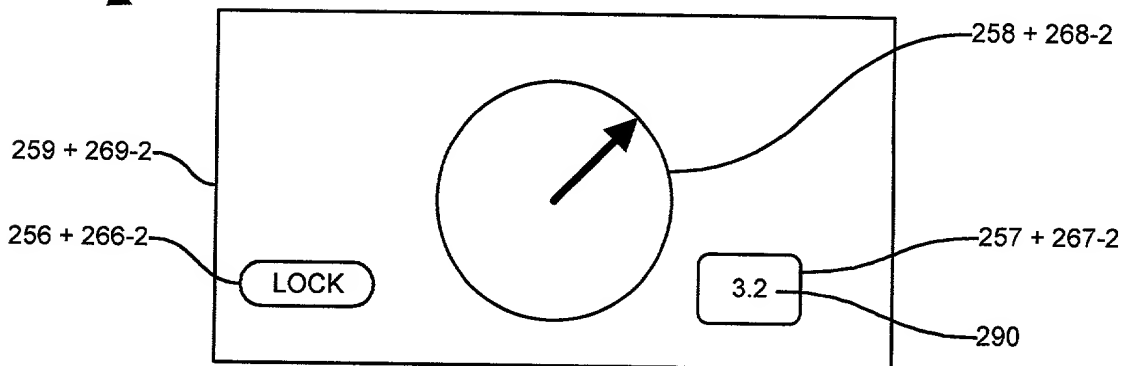
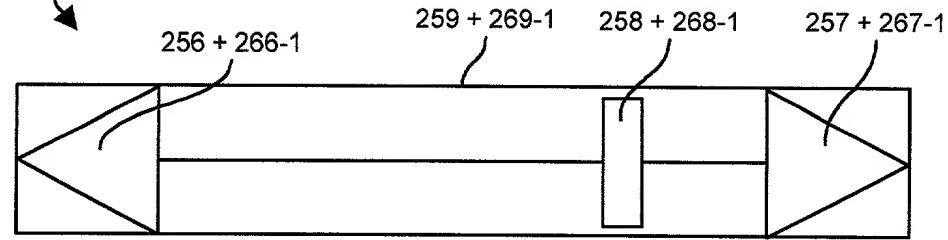
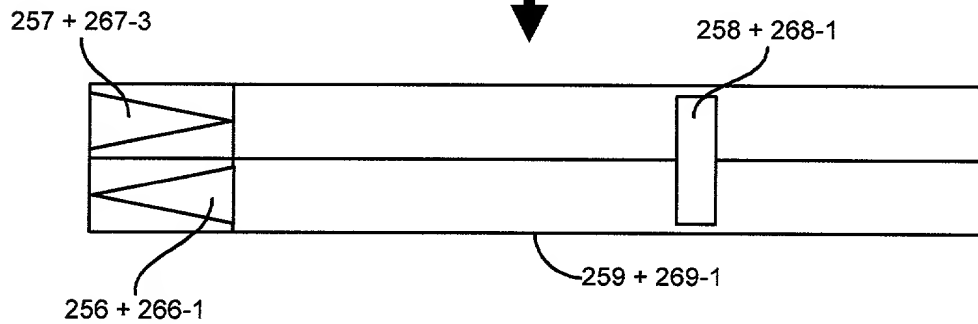


FIG. 6

280-1  
FIRST COMPLEX  
CONSTRUCT  
(E.G., HORIZONTAL  
SCROLLBAR WITH  
DUAL SIDED BUTTONS)



280-3  
NEW (E.G. THIRD)  
COMPLEX  
CONSTRUCT  
(E.G., HORZ.  
SCROLLBAR W/  
SINGLE SIDED  
BUTTONS)



242  
PERSONALITY  
SELECTOR

267-3 BUTTON  
PERSONALITY A  
(E.G., R.A.L.)

270  
PLUGABLE  
PERSONALITY ENGINE

FIG. 7